

WOODS

1004624 SUB-FRAME MOUNTING KIT

**Woods Backhoe Model:
BH6500/7500**

mounting to

**Kubota Tractor Model:
MX5000
2WD & FWA**

equipped with or without:

Woods Loaders:

1009

1012

1016

Kubota Loaders:

LA852-1

LB702

MAN0094

WOODS®

TO THE DEALER:

Assembly and proper installation of this product is the responsibility of the WOODS dealer. Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists in the Operator's Manual are completed before releasing equipment to the owner.

The dealer must complete the Warranty Registration included in this manual. Both dealer and customer must sign the registration which certifies that all Dealer Check List items have been completed. The dealer is to return the prepaid postage portion to WOODS, give one copy to the customer, and retain one copy. **Note: Warranty credit is subject to this form being completed and returned.**

TO THE OWNER:

Read this manual before operating your WOODS equipment. The information presented will prepare you to do a better and safer job. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all the adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your dealer or, in the United States and Canada, by calling 1-800-319-6637.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment.

For service, your authorized WOODS dealer has trained mechanics, genuine WOODS service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine WOODS service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model: _____ **Date of Purchase:** _____

Serial Number: (see Safety Decal section for location) _____

Provide this information to your dealer to obtain correct repair parts.

Throughout this manual, the term **IMPORTANT** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION**, **WARNING** and **DANGER** are used in conjunction with the Safety-Alert Symbol, (a triangle with an exclamation mark), to indicate the degree of hazard for items of personal safety.



This Safety-Alert Symbol indicates a hazard and means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

 **DANGER**

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

 **WARNING**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed.

 **CAUTION**

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

IMPORTANT

Indicates that failure to observe can cause damage to equipment.

NOTE

Indicates helpful information.

WOODS[®]

ALITEC[®]
ALLOWAY[®]
BMP[®]
CENTRAL FABRICATORS[®]
GANNON[®]
GILL[®]
WAIN-ROY[®]
WOODS[®]

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SAFETY RULES



ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

INSTALLATION

■ This Sub-Frame Mounting Kit is to be used only for the backhoes and tractors specified in the Sub-Frame Mount Installation section of this manual. Any other use or modification of this mounting kit may result in serious injury or death.

■ Hydraulics must be connected as instructed in this manual. Do not substitute parts, modify, or connect in any other way.

■ After connecting hoses, check that all control lever positions function as instructed in the Operator's Manual. Do not put into service until control lever and equipment movements are correct.

■ Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals are available from dealer or, in the United States and Canada, call 1-800-319-6637.) Failure to follow instructions or safety rules can result in serious injury or death.

■ Know your controls and how to stop engine and attachment quickly in an emergency.

■ Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.

■ Make sure that all operating and service personnel know that if hydraulic fluid penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. **CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**

■ Check that all hardware is properly installed. Always tighten to torque chart specifications unless instructed otherwise in this manual.

■ Air in hydraulic systems can cause erratic operation and allows loads or equipment components to drop unexpectedly. When connecting equipment or hoses or performing any hydraulic maintenance, purge any air in hydraulic system by operating all hydraulic functions several times. Do this before putting into service or allowing anyone to approach the equipment.

■ After connecting hoses, check that all control lever positions function as instructed in the Operator's Manual. Do not put into service until control lever and equipment movements are correct.

■ Protective hose sleeves must cover all hydraulic hoses within 20 inches of the operator and be secured onto metal hose fittings. Replace hoses or sleeves if damaged or if protective sleeve cannot be properly positioned or secured.

■ Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.

■ Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

■ Make sure attachment is properly secured, adjusted, and in good operating condition.

■ This mounting kit is designed to provide secure mounting and adequate operator clearance when properly installed. Check clearance dimensions shown in figure 1 to be sure you have installed mounting kit correctly. Follow all mounting instructions in this manual. Do not operate backhoe unless there is adequate clearance. Failure to check and comply with these instructions may result in serious injury or death.

■ Power unit must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS systems in "locked up" position at all times.

SAFETY RULES



ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



- Remove seat and upper support assembly before installing or removing backhoe from tractor. Failure to comply may result in equipment failure and/or personal injury.
- If tractor is equipped with draft sensing control, set control to “HEAVY” (minimum sensitivity) position.
- On tractors equipped with optional “Draft Control Hitch,” you must install the “Draft Lockout” (provided in sub-frame kit) into position as shown. Failure to install the “Draft Lockout” will allow upper hitch to move during backhoe operation and could result in operator injury.
- A minimum 25% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with a loader, front wheel weights, ballast in tires, or front tractor weights. Weigh the tractor and equipment. Do not estimate.
- Do not allow bystanders in the area when operating, attaching, removing, assembling, or servicing equipment.
- Before operating, make sure stabilizer pads are lowered firmly to the ground. Stabilizer arms provide support for the backhoe and support for the backhoe mounting brackets.
- The only time the backhoe may be operated from a position other than the operator seat is during backhoe attachment and removal. Operator must
 - Read Mounting Kit Manual instructions on attaching and removing backhoe and use extreme care.
 - Always stand between rear tire and backhoe stabilizer arms or along side of tractor to avoid being trapped should the boom swing control be accidentally activated.
- Never leave equipment unattended with engine running or with bucket in raised position. Always engage swing and boom transport locks, relieve system pressure by operating controls, and remove ignition key before leaving equipment.
- Refer to backhoe manual and follow all maintenance safety rules and instructions.
- Do not modify or alter or permit anyone else to modify or alter the equipment or any of its components in any way.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.
- Tighten all bolts, nuts and screws to torque chart specifications. Check that all cotter pins are installed securely to ensure equipment is in a safe condition before putting unit into service.



BACKHOE SUB-FRAME INSTALLATION

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

DANGER

■ This mounting kit is designed to provide secure mounting and adequate operator clearance when properly installed. Check clearance dimensions shown in figure 1 to be sure you have installed mounting kit correctly. Follow all mounting instructions in this manual. Do not operate backhoe unless there is adequate clearance. Failure to check and comply with these instructions may result in serious injury or death.

■ The only time the backhoe may be operated from a position other than the operator seat is during backhoe attachment and removal. Operator must

- Read Mounting Kit Manual instructions on attaching and removing backhoe and use extreme care.
- Always stand between rear tire and backhoe stabilizer arms or along side of tractor to avoid being trapped should the boom swing control be accidentally activated.

WARNING

■ Only use 1004624 Sub-Frame Mounting Kit for mounting Woods BH6500/7500 backhoe on Kubota MX5000 tractor equipped with or without Woods 1009, 1012, 1016 loaders or Kubota LA852-1 and LB702 loaders. Any other use or modification of this mounting kit may result in serious injury or death.

■ Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals are available from dealer or, in the United States and Canada, call 1-800-319-6637.) Failure to follow instructions or safety rules can result in serious injury or death.

■ Keep all persons away from operator control area while performing adjustments, service, or maintenance.

■ Before working on backhoe, extend boom and dipperstick and place bucket on ground. Make sure that all system pressure has been relieved by operating controls before performing maintenance or service or before disconnecting any hydraulic lines.

■ A minimum 25% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with a loader, front wheel weights, ballast in tires, or front tractor weights. Weigh the tractor and equipment. Do not estimate.

■ Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.

SUB-FRAME INSTALLATION Cont'd

CAUTION

■ Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

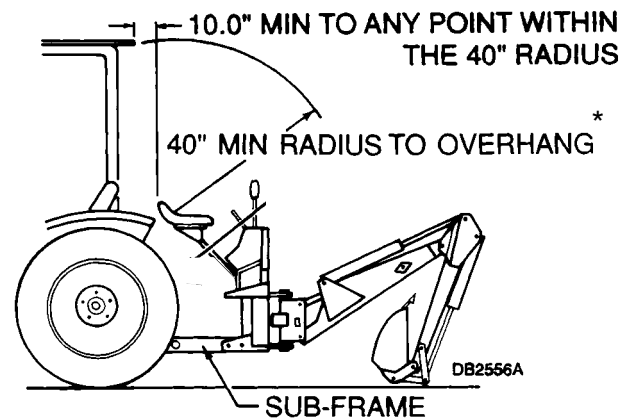


Figure 1 Sub-Frame Clearance

Tractor Preparation

NOTE: For installing this sub-frame, reference to right, left, forward and rearward directions are determined from the operator's position in the tractor seat.

NOTE: Leave all hardware loose until sub-frame weldment has been fit up.

1. Refer to the WOODS BH6500/7500 Backhoe Operator's Manual for backhoe assembly instructions.
2. Remove the tractor top link, 3-point lift lower arms, and anti-sway links.
3. Remove lower arm pivot pins. Keep the hardware for attaching rear hangers.

For Tractors with Kubota LA852-1 and LB702 or Woods 1009, 1012, 1016 Loaders.

4. Remove loader crossbar assembly from between right and left loader mounts.

SUB-FRAME INSTALLATION Cont'd

Install Front Mount

For Tractors with Kubota LA852 and LB702 or Woods 1009, 1012, 1016 Loaders (Figure 2)

1. Install front hanger (2) to bottom of tractor between right and left loader mounts using two cap screws (18) and flat washers (17).
2. Secure front hanger to right side of loader mount using three cap screws (22), flat washers (19) and hex nuts (24).
3. Insert spacer (9) between left loader mount and front hanger. Secure using three cap screws (23), flat washers (19) and hex nuts (24).

2. 1000556 Front hanger
3. 1000562 Mounting plate
9. 1004627 Spacer
17. 57816 1/2 Hardened flat washer
18. 65505 M12 x 1.25P x 30mm Cap screw
19. 46070 9/16 Hardened flat washer thick
20. 64084 M14 x 1.5P x 30mm Cap screw
22. 23138 M14 x 1.5P x 45mm Cap screw
23. 307359 M14 x 1.5P x 70mm Cap screw
24. 43104 M14 x 1.5P Hex nut

For Tractors without Loader (Figure 3)

4. Install mounting plates (3) to sides of tractor housing, using six cap screws (20, three per side) and flat washer (19).
5. Install front hanger (2) between mounting plates and secure to bottom of tractor two using cap screws (18) and flat washers (17).
6. Secure front hanger to right mounting plate using three cap screws (22), flat washers (19) and hex nuts (24).
7. Insert spacer (9) between left mounting plate and front hanger. Secure using three cap screws (23), flat washers (19) and hex nuts (24).

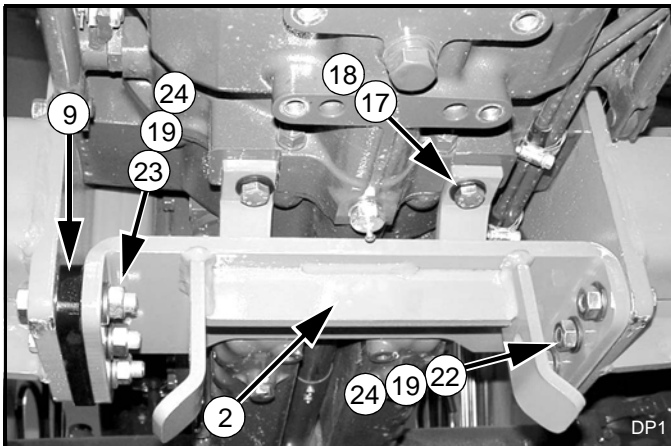


Figure 2 Front Hanger Assembly Installed with Loader Mount

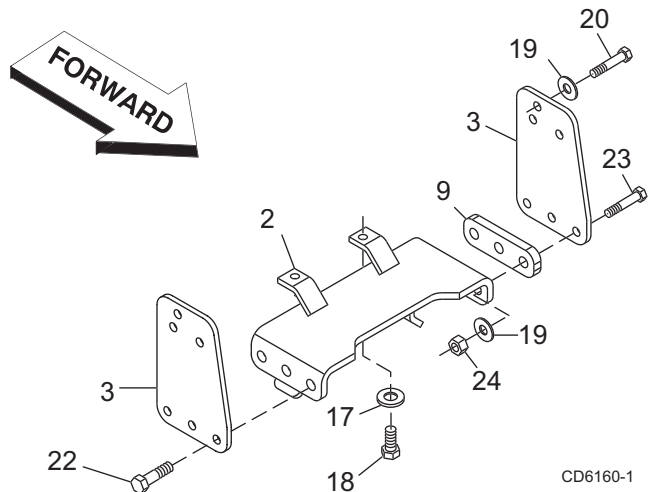


Figure 3 Front Mount Installation without Loader Mount

SUB-FRAME INSTALLATION Cont'd

Install Rear Hanger Bracket

1. Install rear hanger bracket (4) under tractor, between the drawbar frame (A) and the mid PTO drive housing (B) (if equipped).
2. Position rear hanger bracket with the slots to the rear of the tractor. Secure with cap screws (21) and flat washers (19).

- A. ----- Drawbar frame
B. ----- PTO Drive housing
4. 62977 Rear hanger bracket
19. 46070 9/16 Flat washer, hardened (2)
21. 16087 M14 x1.5 x 35mm Cap screw (2)

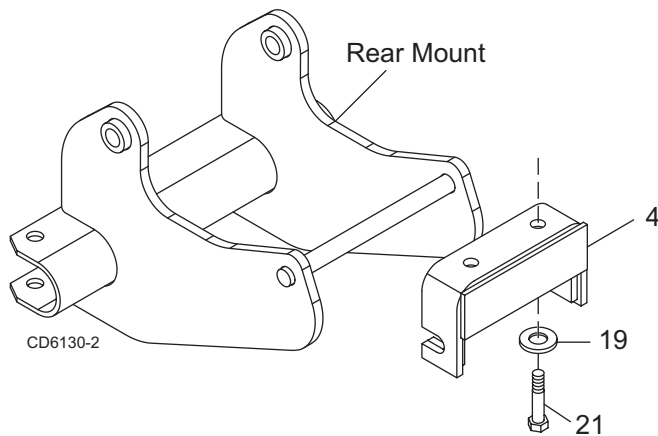


Figure 4 Rear Hanger Bracket & Rear Mount

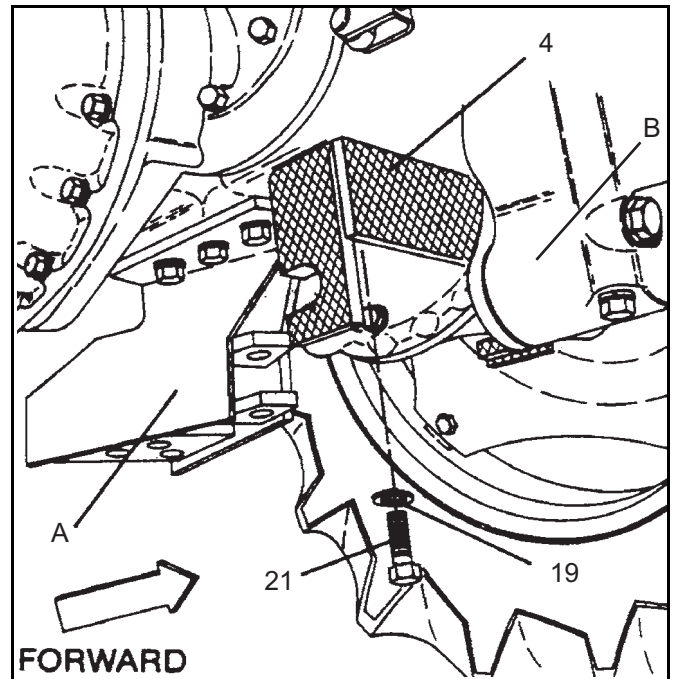


Figure 5 Rear Hanger Bracket Installation

SUB-FRAME INSTALLATION Cont'd

Install Rear Mount

1. Slide rear mount (5) into slots of rear hanger bracket (4).
2. Pivot rear mount upward and secure to tractor with clevis pins from lower lift arms (removed during tractor preparation).

4. 62977 Rear hanger bracket
5. 1004628 Rear mount

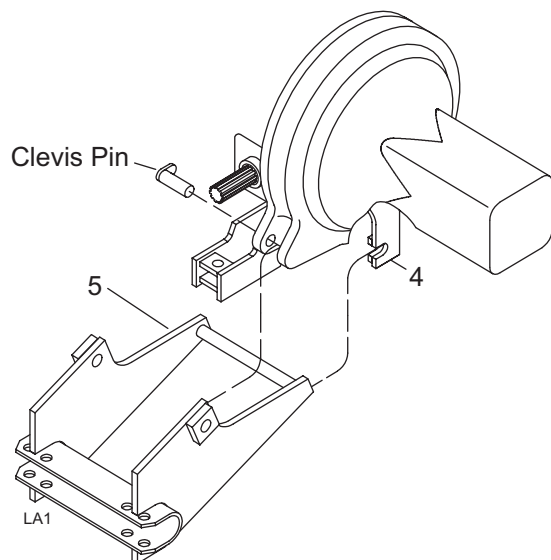


Figure 6 Rear Mount Installation (Typical)

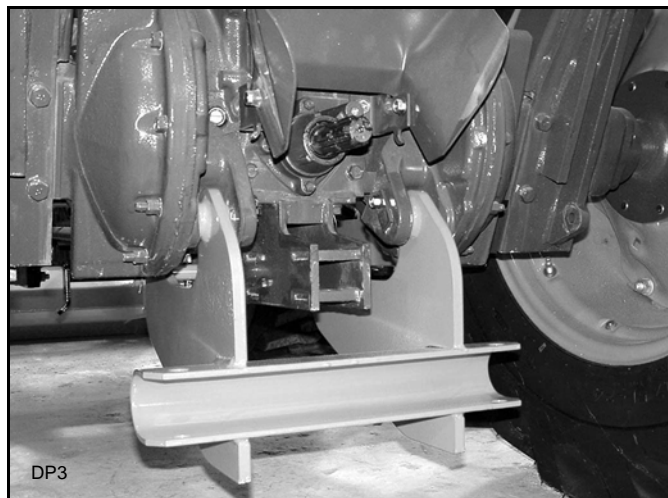


Figure 7 Rear Mount Installed

Sub-Frame Fit-Up

1. Center sub-frame under tractor.
2. Insert cross tube of sub-frame into channel of rear hanger as shown in Figure 8.
3. Install clevis pins (8) and hair pins (15) to secure in rear mount as shown in Figure 9.

8. 37827 Clevis pin, .75 x 3.14
15. 2688 Hair pin cotter, 5/32

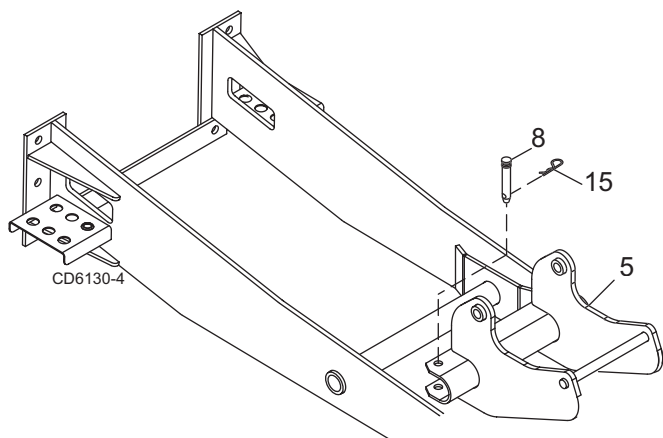


Figure 8 Sub-frame to Rear Mount Connection

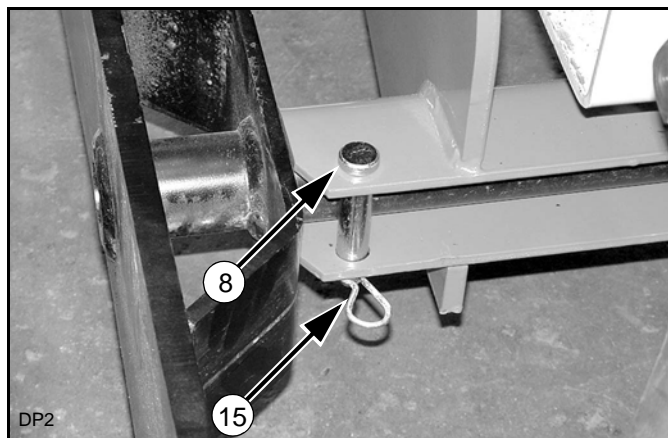


Figure 9 Clevis Pins Installed

SUB-FRAME INSTALLATION Cont'd

Sub-Frame Fit-Up

1. Rotate front end of sub-frame up into the front hanger.

NOTE: Adjust front hanger as necessary to allow alignment with sub-frame.

2. Align front hanger and sub-frame. Install bent pin (7) and klik pin (16) as shown in Figure 10.
3. Once sub-frame is secured into position with bent pin, check fit-up and adjust as necessary.
4. Tighten all hardware to specifications given below.
5. Remove sub-frame from the tractor.

7. 37771 Bent pin .75 x 11.36
16. 62043 Klik pin, 1/4 x 1-3/4

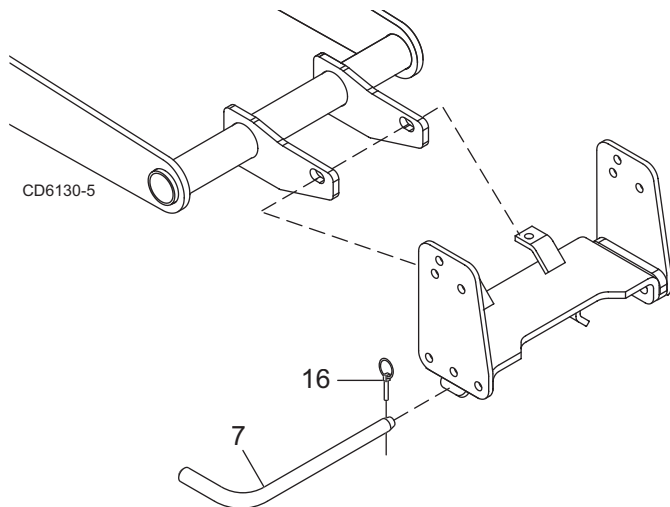


Figure 10 Bent Pin Installed

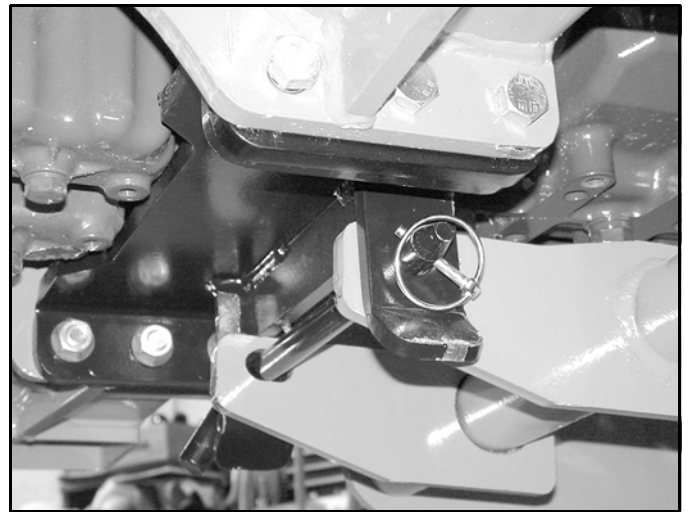


Figure 11 Sub-Frame Fit-Up

Torque all hardware to specification listed below.

TORQUE SPECIFICATIONS			
Cap Screw	Qty	Wrench Size	Required Torque
M12 x 1.25P x 30mm	2	18mm	55 lbs.-ft. (75 N-m)
M14 x 1.5P x 30mm	6	21mm	87 lbs.-ft. (118 N-m)
M14 x 1.5P x 35mm	2	21mm	87 lbs.-ft. (118 N-m)
M14 x 1.5P x 45mm	3	21mm	87 lbs.-ft. (118 N-m)
M14 x 1.5P x 70mm	3	21mm	87 lbs.-ft. (118 N-m)

SUB-FRAME INSTALLATION Cont'd

Attach Sub-Frame to Backhoe

1. Align six holes on the backhoe with holes on sub-frame.
2. Secure with six cap screws (27), hardened flat washers (26), and hex nuts (25) as shown.
3. Tighten according to specifications given below.

25. 1450 3/4 Hex nut
26. 57798 3/4 Hardened flat washer
27. 735 3/4 NC x 2 Cap screw

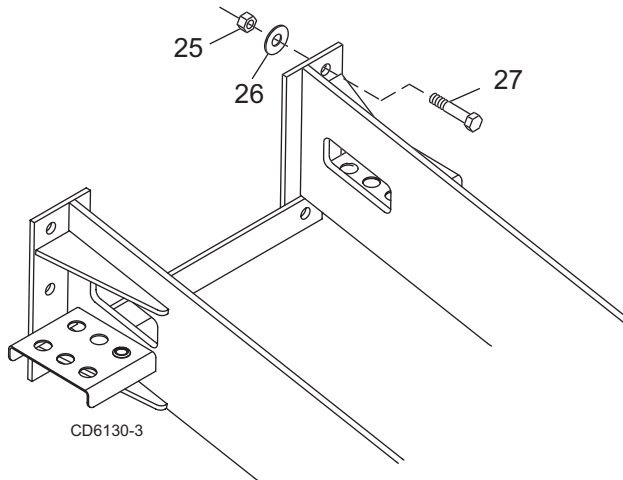


Figure 12 Sub-Frame to Backhoe Hardware

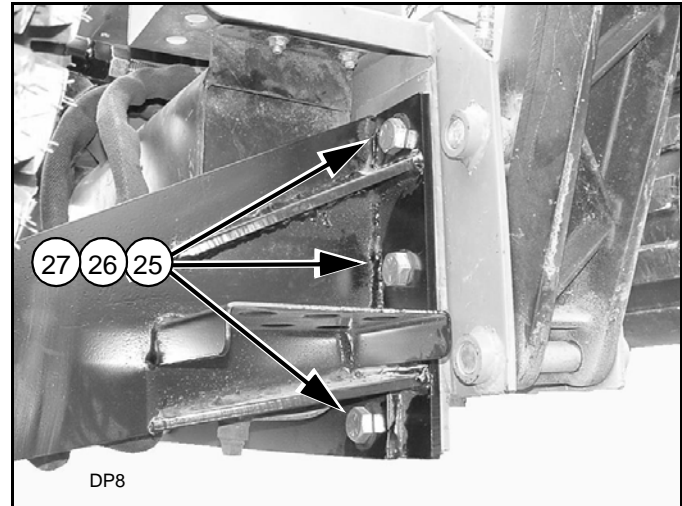


Figure 13 Sub-Frame to Backhoe Installed

TORQUE SPECIFICATIONS

Cap Screw	Qty	Wrench Size	Required Torque
3/4 NC x 2-1/4	6	1-1/8"	297 lbs.-ft. (403 N-m)

HYDRAULIC INSTALLATION

WARNING

■ Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.

■ Make sure that all operating and service personnel know that if hydraulic fluid penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. **CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**

WARNING

■ Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.

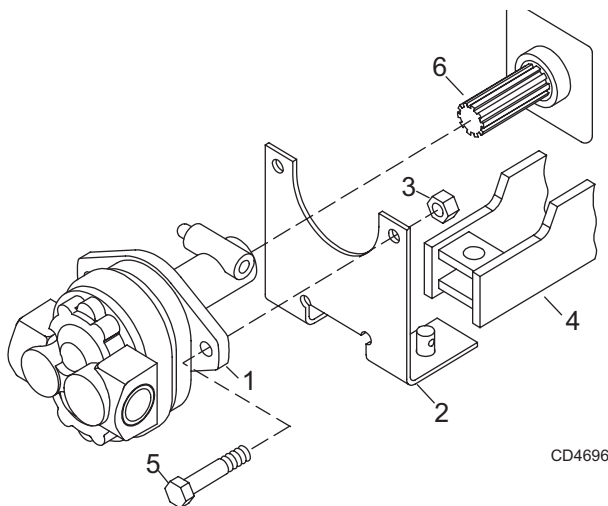
Install Pump Kit 9261

NOTE: For complete information on pump kit installation, consult the Woods BH6500/7500 backhoe operators manual 37541.

NOTE: Discard pump mounting bracket provided in pump kit 9261

1. Attach pump mounting bracket 37917 (supplied with sub-frame mounting kit #1004624) to pump assembly using cap screw and locknut as shown in Figure 14.
2. Torque hardware to 85 lbs.-ft.
3. Attach pump mounting bracket with bent leg toward tractor as shown in Figure 15.

1. Pump assembly with adapter
2. Pump mounting bracket
3. 1/2 NC Hex locknut
4. Tractor drawbar bracket
5. 1/2 NC x 1-1/2" Hex head cap screw
6. Tractor PTO shaft



CD4696

Figure 14 Bump Bracket Installation

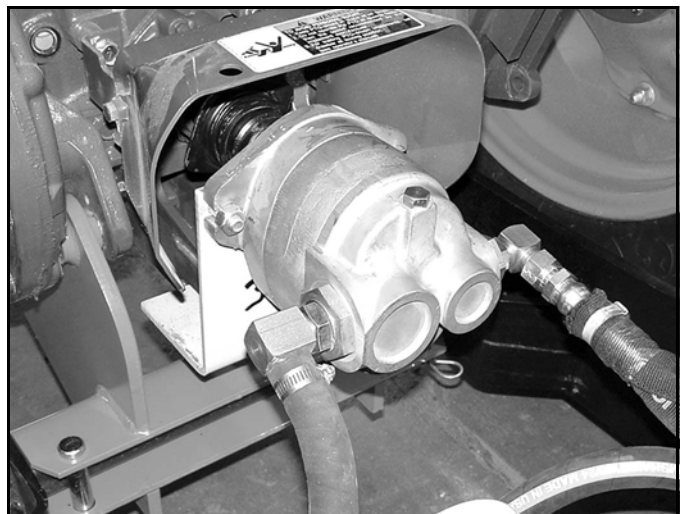


Figure 15 Pump & Bracket Installed

SUB-FRAME & BACKHOE INSTALLATION TO TRACTOR

Mount Sub-Frame & Backhoe to Tractor

DANGER

■ This mounting kit is designed to provide secure mounting and adequate operator clearance when properly installed. Check clearance dimensions shown in figure 1 to be sure you have installed mounting kit correctly. Follow all mounting instructions in this manual. Do not operate backhoe unless there is adequate clearance. Failure to check and comply with these instructions may result in serious injury or death.

■ The only time the backhoe may be operated from a position other than the operator seat is during backhoe attachment and removal. Operator must

- Read Mounting Kit Manual instructions on attaching and removing backhoe and use extreme care.
- Always stand between rear tire and backhoe stabilizer arms or along side of tractor to avoid being trapped should the boom swing control be accidentally activated.

WARNING

■ Remove seat and upper support assembly before installing or removing backhoe from tractor. Failure to comply may result in equipment failure and/or personal injury.

Hydraulic System Check List

Complete check list prior to backhoe operation.

___ Check that backhoe hydraulic pump is secured to the tractor PTO, if equipped.

___ Check all hydraulic fittings and lines to be sure they are tight and free of kinks or twists.

___ Check the tractor hydraulic reservoir to make sure backhoe PTO driven hydraulic system is full (approximately 5-7 US gallons). Service if necessary.

NOTE: See the BH6500/7500 backhoe operator manual for hydraulic oil recommendations. Do not mix hydraulic fluid types.

1. Remove the backhoe seat assembly.
2. Place sub-frame flat on a hard level surface.
3. Back tractor over the sub-frame and center between the tractor rear tires. Position tractor so that the hydraulic system can be connected. Shut off tractor, set brake, remove key.
4. Install the pump bracket over the tractor drawbar to prevent pump rotation. Engage the pump PTO coupler pin firmly in the tractor PTO spline groove.
5. With the tractor PTO and transmission in neutral, start the engine and run at low idle.
6. Smoothly engage the PTO pump to provide backhoe hydraulics.

NOTE: Very little engine power is required to operate the hydraulic system in this mode. Should the engine pull down excessively, check the plumbing hook-up for reversed lines or a control lever stuck in an operating position.

NOTE: You will use the backhoe hydraulics to maneuver the sub-frame into position. Use care in this procedure to avoid being trapped between tractor and backhoe or between backhoe parts.

7. Raise rear of sub-frame up by lowering stabilizers and boom section until crosstube on sub-frame is level with rear mount channel. Keep front of sub-frame low enough to clear tractor.
8. Drive tractor back until sub-frame crosstube slides into rear mount channel. Shut off tractor, set brake, remove key.
9. Fasten sub-frame in place by placing clevis pins into channel hole secure with safety pins.
10. With the tractor engine off, relieve pressure in the backhoe boom and stabilizers to raise sub-frame into front hanger.
11. Install bent pin and klik pin in front hanger mount.
12. Reinstall seat.
13. Start tractor and put backhoe into transport position (see backhoe operator's manual).

NOTE: Install swing lock before transporting.

SUB-FRAME & BACKHOE REMOVAL FROM TRACTOR

Remove Backhoe With Sub-Frame

DANGER

■ The only time the backhoe may be operated from a position other than the operator seat is during backhoe attachment and removal. Operator must

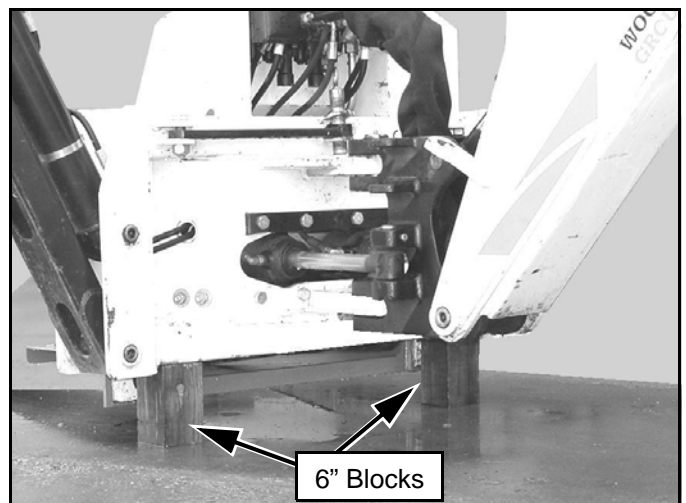
- Read Sub-Frame Mounting Kit Manual instructions on attaching and removing backhoe and use extreme care
- Always stand between rear tire and backhoe stabilizer arms or along side of tractor to avoid being trapped should the boom swing control be accidentally activated.

WARNING

■ Remove seat and upper support assembly before installing or removing backhoe from tractor. Failure to comply may result in equipment failure and/or personal injury.

1. On a hard level surface, center the backhoe boom.
 2. Remove the seat assembly.
 3. Remove retaining pins from front sub-frame bracket and clevis pins from rear hanger bracket OR from sub-frame hooks.
 4. Start the tractor. Engage PTO pump at slow idle speed. Curl the bucket all the way towards the operator.
 5. Remove transport lock.
 6. Extend boom and dipperstick so that dipperstick is vertical.
 7. Rest bucket on the ground and lower stabilizers to take backhoe weight off tractor. Extend boom and stabilizers to release sub-frame.
 8. Keeping the bucket and stabilizers in contact with the ground, raise the rear of the backhoe to pivot the front of the sub-frame down.
- NOTE:** For removal, the front of the sub-frame must be low enough to clear the lowest point of the tractor. Maintain clearance throughout this procedure.
9. Move the tractor far enough to release the sub-frame from the brackets OR from the 3-point lift pins.
 10. Place 6" blocks under backhoe mainframe and raise stabilizers to lower backhoe onto the blocks as shown below.
 11. Disengage PTO, turn off engine, set brakes, and remove key before leaving tractor seat.
 12. Remove the backhoe hydraulic pump from the PTO shaft if equipped (see Store Hydraulic Pump section), or disengage the tractor hydraulic circuit and disconnect the hydraulic quick couplers.
 13. Reinstall seat assembly.
 14. Make sure backhoe and sub-frame clear the tractor chassis. Start tractor and drive the tractor away.

NOTE: For instructions on extended storage, see backhoe operator's manual



SUB-FRAME & BACKHOE INSTALLATION TO TRACTOR

Store Hydraulic Pump

1. Disconnect pump (1) from tractor PTO.
2. Rotate pump and insert pin on pump mounting bracket through outside hole on foot rest as shown in Figure 16.
3. Secure pump bracket to foot rest (2) with klik pin (16).

- | | |
|-----|----------------------------|
| 1. | Pump |
| 2. | Backhoe foot rest |
| 16. | 62043 1/4 x 1-3/4 Klik pin |

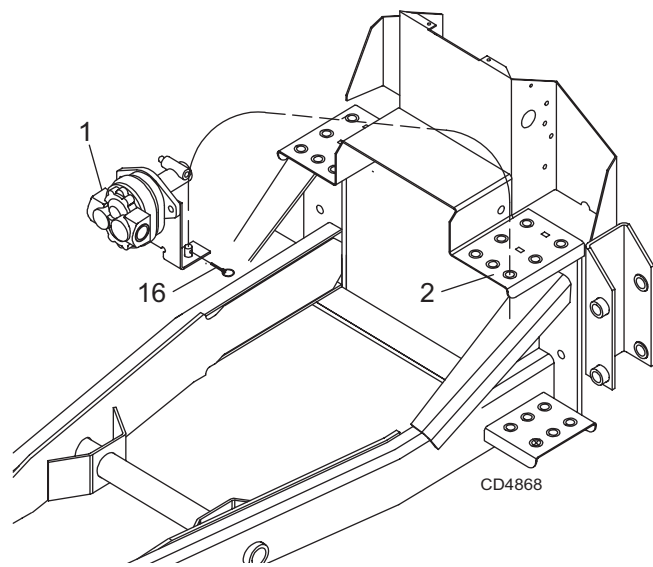
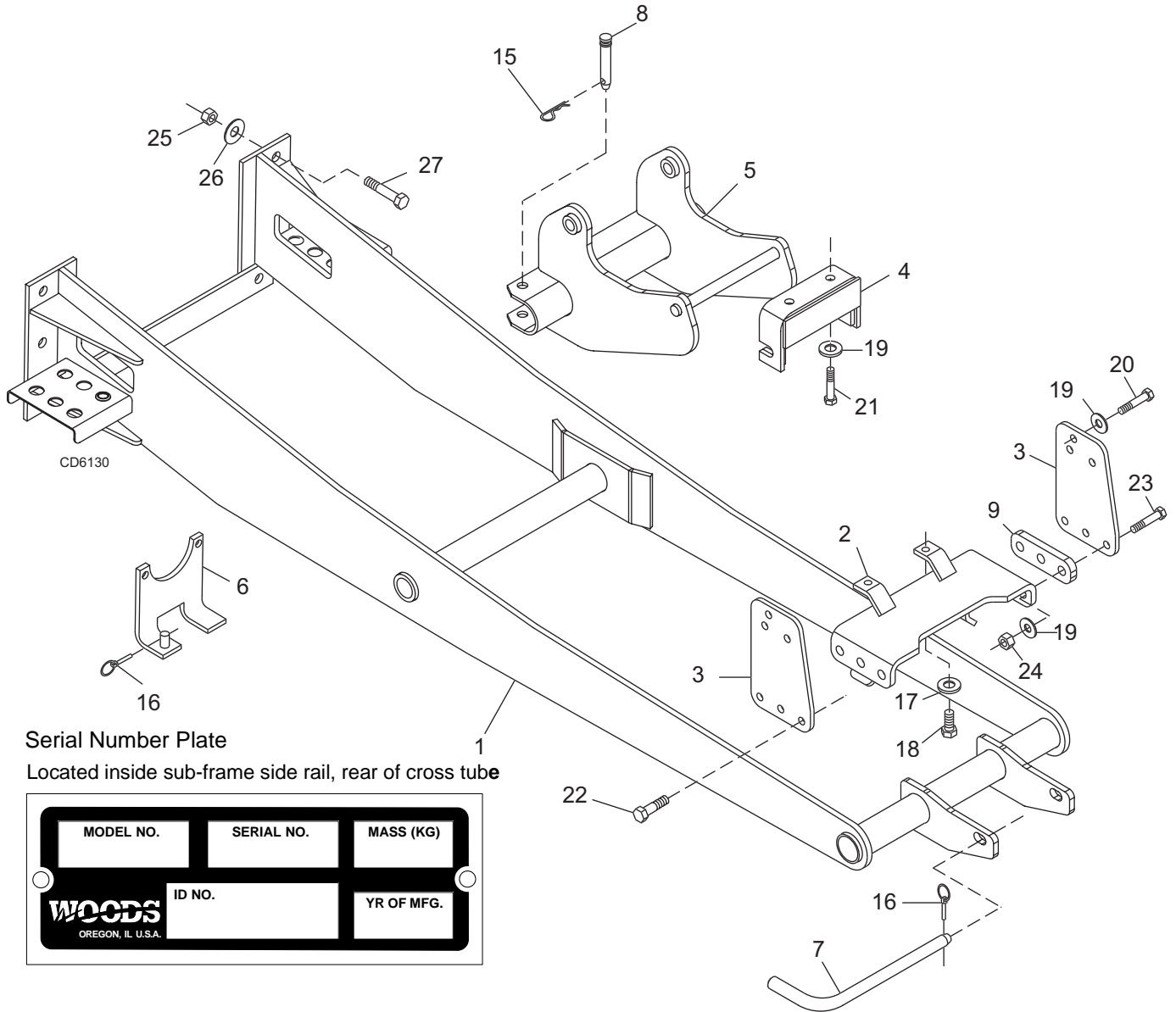


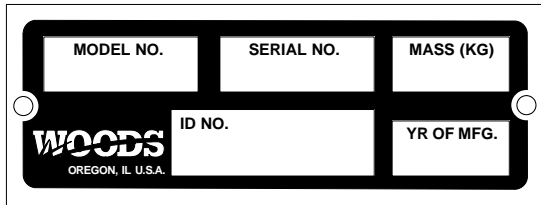
Figure 16 Hydraulic Pump Storage

NOTES

1004624 SUB-FRAME MOUNTING KIT



Serial Number Plate
 Located inside sub-frame side rail, rear of cross tube



REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
1	1004637	1	Sub-Frame BH6500/7500	17	57816	2	1/2 Hardened flat washer
2	1000556	1	Front hanger assembly	18	65505	2	M12 x 1.25P x 30mm Cap screw
3	1000562	2	Mounting plate (used without loader)	19	46070	14	9/16 Hardened flat washer thick
4	62977	1	Rear hanger bracket	20	64084	6	M14 x 1.5P x 30mm Cap screw
5	1004628	1	Rear mount	21	16087	2	M14 x 1.5P x 35mm Cap screw
6	37917	1	Pump bracket	22	23138	3	M14 x 1.5P x 45mm Cap screw
7	37771	1	Bent pin .75 x 11.36	23	307359	3	M14 x 1.5P x 70mm Cap screw
8	37827	2	Clevis pin, .75 x 3.14	24	43104	6	M14 x 1.5P Hex nut
9	1004627	1	Spacer, 6.25 x 2.00 x .625	25	1450	6	3/4 NC Hex nut
15	2688	2	Hair pin cotter, 5/32	26	57798	6	3/4 Hardened flat washer
16	62043	2	Klik pin, 1/4 x 1-3/4	27	735	6	3/4 NC x 2 Cap screw GR5

BOLT TORQUE CHART

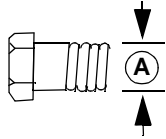
Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.

Fasteners must always be replaced with the same grade as specified in the manual parts list.

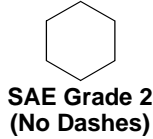
Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for metric hardware.

Make sure fastener threads are clean and you start thread engagement properly.

All torque values are given to specifications used on hardware defined by SAE J1701 & J1701M JUL96.



SAE SERIES TORQUE CHART



SAE Bolt Head Identification

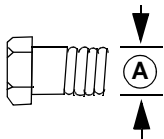


**SAE Grade 5
(3 Radial Dashes)**

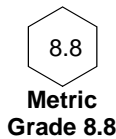


**SAE Grade 8
(6 Radial Dashes)**

A Diameter (Inches)	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m
1/4"	7/16"	6	8	10	13	14	18
5/16"	1/2"	12	17	19	26	27	37
3/8"	9/16"	23	31	35	47	49	67
7/16"	5/8"	36	48	55	75	78	106
1/2"	3/4"	55	75	85	115	120	163
9/16"	13/16"	78	106	121	164	171	232
5/8"	15/16"	110	149	170	230	240	325
3/4"	1-1/8"	192	261	297	403	420	569
7/8"	1-5/16"	306	416	474	642	669	907
1"	1-1/2"	467	634	722	979	1020	1383



METRIC SERIES TORQUE CHART



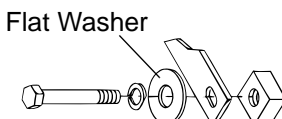
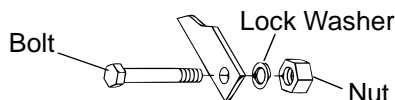
Metric Bolt Head Identification



**10.9
Metric
Grade 10.9**

A Diameter & Thread Pitch (Millimeters)	Wrench Size	COARSE THREAD				FINE THREAD				A Diameter & Thread Pitch (Millimeters)
		MARKING ON HEAD				MARKING ON HEAD				
		Metric 8.8		Metric 10.9		Metric 8.8		Metric 10.9		
		N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	
6 x 1.0	10 mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13 mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16 mm	39	29	54	40	41	30	57	42	10 x 1.25
12 x 1.75	18 mm	68	50	94	70	75	55	103	76	12 x 1.25
14 x 2.0	21 mm	109	80	151	111	118	87	163	120	14 x 1.5
16 x 2.0	24 mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27 mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30 mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34 mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36 mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46 mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0

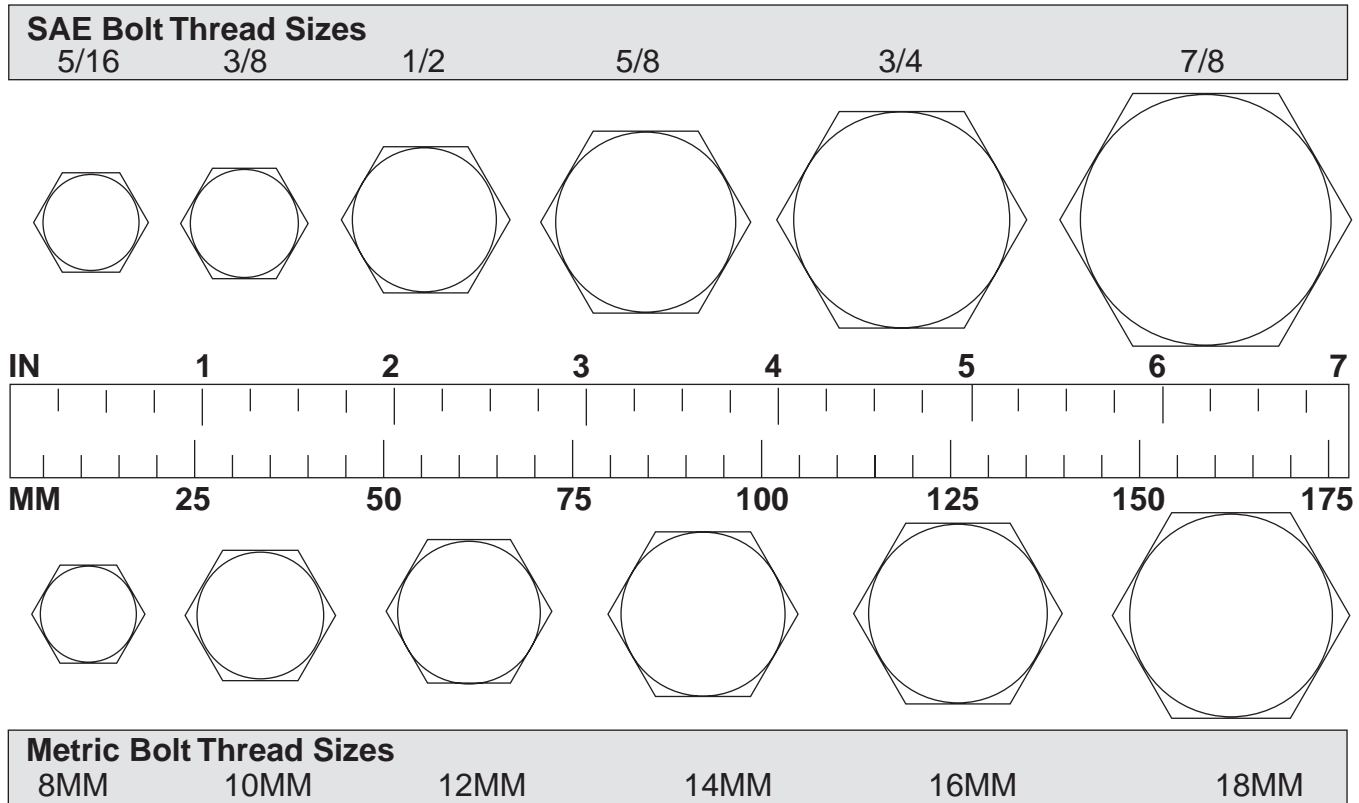
Typical Washer Installations



8/9/00

BOLT SIZE CHART

NOTE: Chart shows bolt thread sizes and corresponding head (wrench) sizes for standard SAE and metric bolts.



ABBREVIATIONS

AG.....	Agriculture	NC.....	National Coarse
ATF.....	Automatic Transmission Fluid	NF.....	National Fine
BSPP.....	British Standard Pipe Parallel	NPSM.....	National Pipe Straight Mechanical
BSPTM.....	British Standard Pipe Tapered Male	NPT.....	National Pipe Tapered
CV.....	Constant Velocity	NPT SWF.....	National Pipe Tapered Swivel Female
CCW.....	Counter-Clockwise	ORBM.....	O-Ring Boss - Male
CW.....	Clockwise	P.....	Pitch
F.....	Female	PBY.....	Power Beyond
GA.....	Gauge	psi.....	Pounds per Square Inch
GR (5, etc.).....	Grade (5, etc.)	PTO.....	Power Take Off
HHCS.....	Hex Head Cap Screw	QD.....	Quick Disconnect
HT.....	Heat Treated	RH.....	Right Hand
JIC.....	Joint Industry Council 37° Degree Flare	ROPS.....	Roll Over Protective Structure
LH.....	Left Hand	RPM.....	Revolutions Per Minute
LT.....	Left	RT.....	Right
m.....	Meter	SAE.....	Society of Automotive Engineers
mm.....	Millimeter	UNC.....	Unified Coarse
M.....	Male	UNF.....	Unified Fine
MPa.....	Mega Pascal	UNS.....	Unified Special
N.....	Newton		

WARRANTY

(Replacement Parts For All Models Except Mow'n Machines)

WEC Company, d/b/a Woods Equipment Company ("WOODS"), warrants this product to be free from defect in material and workmanship for a period of ninety (90) days from the date of delivery of the product to the original purchaser with the exception of V-belts, which will be free of defect in material and workmanship for a period of 12 months.

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of WOODS, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not cover normal wear or tear, or normal maintenance items.

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**Woods Equipment
Company**

2606 South Illinois Route 2
Post Office Box 1000
Oregon, Illinois 61061

815-732-2141 tel
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WARRANTY

(All Models Except Mow'n Machines)

Please Enter Information Below and Save For Future Reference.

Date Purchased: _____ From (Dealer): _____

Model Number: _____ Serial Number: _____

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The warranty period for certain gearboxes are listed below:

Model No.	Part Warranted	Duration
1160, 1190, 1260, 2120, 2162, 3180, 3240, BB600, BB720, BB840, BB6000, BB7200, BB8400, BW180	Gearbox components	5 years from the date of delivery to the original purchaser.
1130, BB48, BB60, BB72, BB84	Gearbox components	3 years from the date of delivery to the original purchaser.
BW180	Gearbox components	1 year from the date of delivery to the original purchaser if used in rental or commercial applications.

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This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

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WOODS' obligation under this Warranty is limited to, at WOODS' option, the repair or replacement, free of charge, of the product if WOODS, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. **The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.** WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product. **THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.**

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This Warranty is subject to any existing conditions of supply which may directly affect WOODS' ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, serviceperson, salesperson, or employee of any company, including without limitation, WOODS, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

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